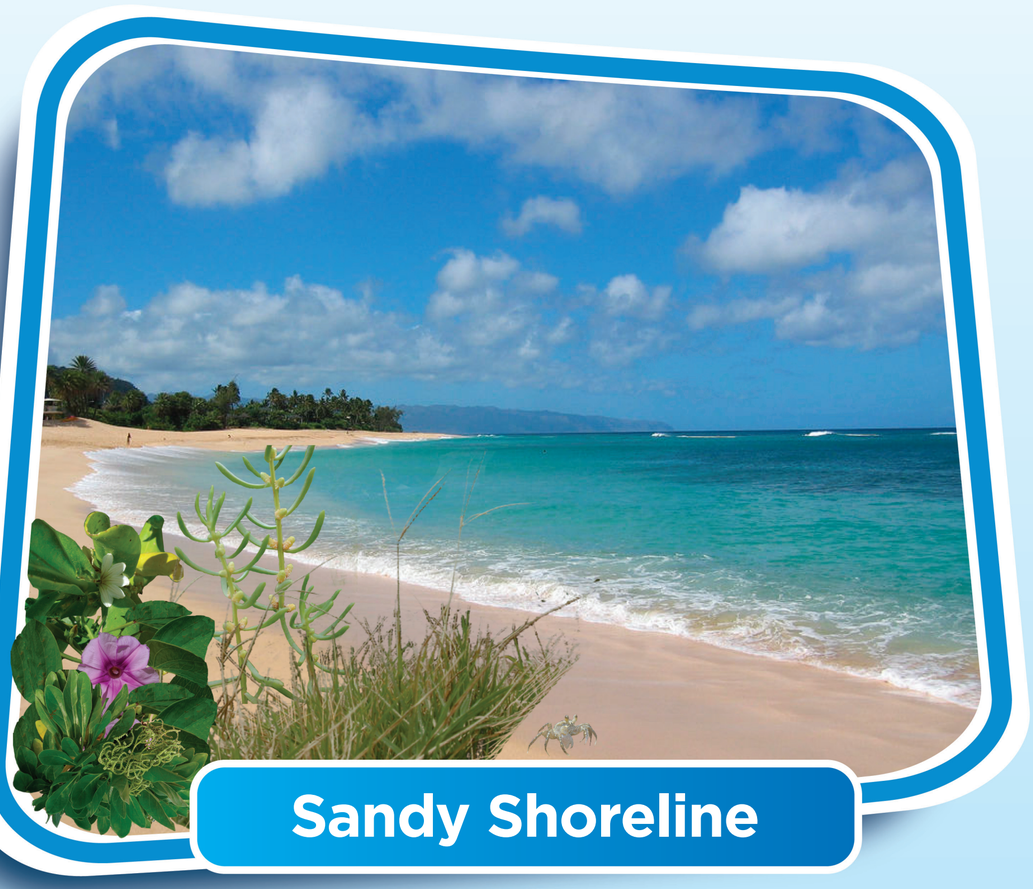
LESSONS FROM THE S.E.A.

SEA. EARTH. ATMOSPHERE

GRADE 3 UNIT 1

Shoreline Habitats



Sandy Shoreline

Beach Morning Glory:
Buds are pointed and twisted (structure from wind).
Sends out long runners to help it keep rooted in sandy soil.

Pickleweed:
Thick, succulent leaves retain moisture.
Shallow, spreading root system.

Bermuda Grass:
Spreading root system for clinging to sandy shore.

Beach Naupaka:
Thick leaves prevent water loss.
Shallow spreading root system.

Beach Heliotrope:
Narrow silky leaves for sand and wind protection.

Ghost Crab
Stalk-eyed to find food quickly.
Pale body color to camouflage in sandy haibtat.

Rocky Shoreline

Brittlestar:
Flattened body for hiding in crevices and rocks.
Able to break off and re-grow arms.

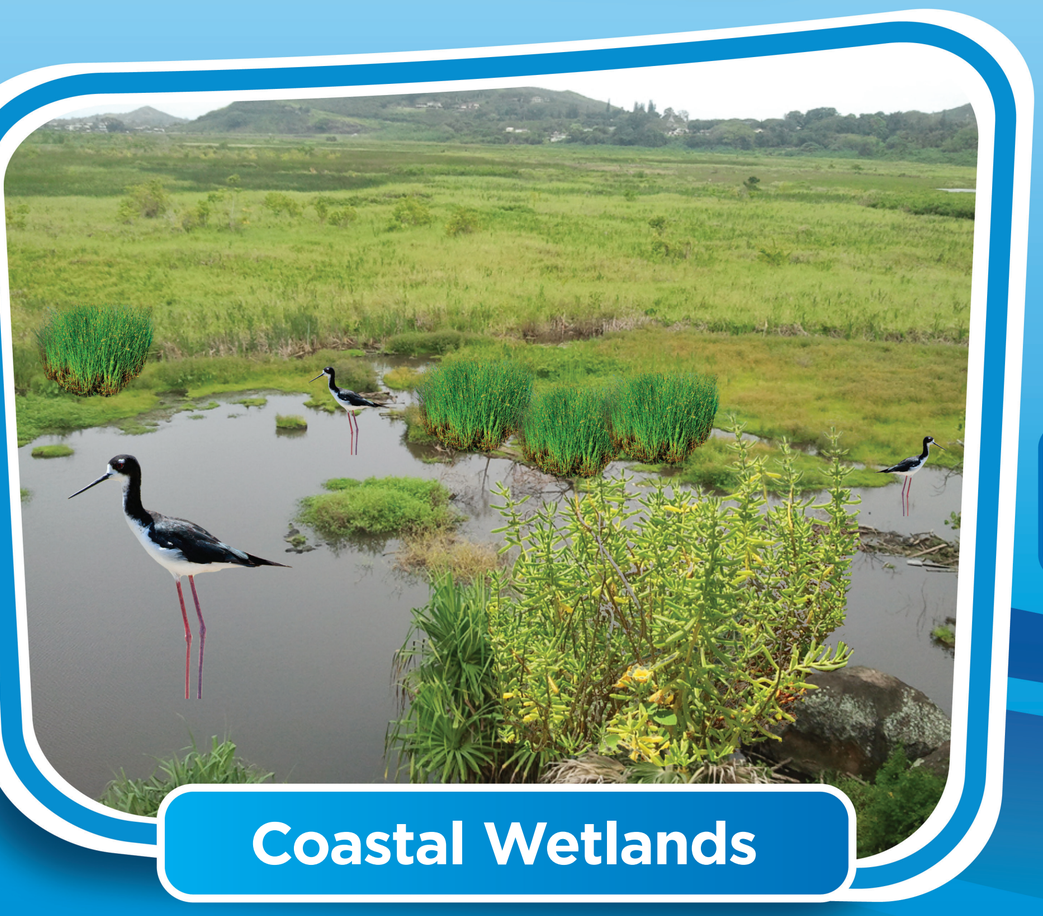
Goby / O‘opu naniha:
Camouflage color makes it hard to see.
Pelvic fins are fused to form a suction disc to cling to rocks as waves wash through.

Limpet / ‘Opihi:
Low profile cap-shaped shell for wave resistance.
Strong foot for clinging to rocks.

Nerite Snail / Pipipi
Watertight shell for moisture retention.
Shell has trap door (operculum) that closes to retain moisture.

Periwinkle:
Watertight shell to maintain moisture.
Clustering behavior reduces heat and maintains moisture.

Shingle Urchin:
Many sucker-type tube feet for clinging to rocks. Flattened, tile-like spines to deflect force of waves.



Coastal Wetlands

Hawaiian Stilt / Ae‘o:
Long, sharp beak for probing in mud.
Very long legs for wading in water

Batis / Akuli kuli kai:
Succulent thick waxy leaves for moisture retention.
Low growing, crawling root system for sandy soil and windy climate.

Makaloa
Grass-like structure grows in clumps to help prevent erosion